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CLAIMS

What is claimed is:

1. A method for optimizing performance of a software application within a computer system, said method comprising:

assigning each of a plurality of agents a different range of numbers, wherein each range initially has an identical size;

generating a random number;

requesting an agent among said plurality of agents having an assigned range within which said random number falls to change a parameter of said software application; and

adjusting at least said range of numbers assigned to said agent according to a performance result of said computer system.

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- 2. The method of Claim 1, wherein said generating further includes generating a random number by a controller.
- The method of Claim 1, wherein said method further includes generating a working weight for each of said plurality of agents after an iteration.
 - 4. The method of Claim 3, wherein said adjusting further includes adjusting according to said working weight for each of said plurality of agents.

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5. A computer program product residing on a computer usable medium for optimizing software applications within a computer system, said computer program product comprising:

program code means for assigning each of a plurality of agents a different range of numbers, wherein each range initially has an identical size;

program code means for generating a random number;

program code means for requesting an agent among said plurality of agents having an assigned range within which said random number falls to change a parameter of said software application; and

program code means for adjusting at least said range of numbers assigned to said agent according to a performance result of said computer system.

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- 6. The computer program product of Claim 5, wherein said computer program product further includes program code means for generating a working weight for each of said plurality of agents after an iteration.
 - 7. The computer program product of Claim 6, wherein said program code means for adjusting further includes program code means for adjusting according to said working weight for each of said plurality of agents.

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8. A data processing system having a controller for optimizing software applications within a computer system, said data processing system comprising:

means for assigning each of a plurality of agents a different range of numbers, wherein each range initially has an identical size;

means for generating a random number;

means for requesting an agent among said plurality of agents having an assigned range within which said random number falls to change a parameter of said software application; and

means for adjusting at least said range of numbers assigned to said agent according to a performance result of said computer system.

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- 9. The data processing system of Claim 8, wherein said means for generating a random number is a controller.
 - 10. The data processing system of Claim 8, wherein said data processing system further includes means for generating a working weight for each of said plurality of agents after an iteration.
 - 11. The data processing system of Claim 10, wherein said means for adjusting further includes means for adjusting according to said working weight for each of said plurality of agents.